

## Centrifugal Filter Reference Guide

**Part Numbers:** 230708, 230710, 230712, 230714, 230716, 230720, 230722, 230724, 230726, 230728

### Introduction

Centrifugal Filters are designed with 2 vertical polyethersulfone (PES) membranes, ranging from 5 to 100kDa Molecular Weight Cut-Offs (MWCO). These filters are suitable for several applications, including protein concentration, size exclusion protein purification, buffer exchange, and desalting.

### General Operation Guidelines:

- Sample concentration is generally achieved after 10 to 30 minutes of centrifugation. Flow rate can be affected by several variables, including MWCO, sample concentration, solution viscosity, relative centrifugal force (RCF) applied, and temperature.

Sample application and centrifugation guidelines

Centrifugal Filter Model	Conical Receiver Tube	Max Cartridge Volume	Max RCF Swing Bucket	Max RCF Fixed Angle
4mL Filters	15mL	5mL	4000 x g	5000 x g
15mL Filters	50mL	15mL	3000 x g	4000 x g

- After centrifugation, samples may be collected from the cartridge pocket with a pipette.

### **Additional Information**

- Centrifugal Filters are not autoclavable, as steam sterilization will alter the porosity of the PES membranes. Sterilization can be achieved by applying a solution of 70% ethanol to the filters.
- The PES membranes contain trace amounts of glycerin and sodium azide. Pre-rinsing is not required to use these filters. If these trace components are expected to interfere with sample analysis, the cartridges may be rinsed with deionized water or a buffer solution.
  1. Fill the cartridge with water or buffer solution
  2. Centrifuge, and discard the flow-through
  3. Use the rinsed cartridge immediately, or store at 4°C with water or buffer covering the membranes